

## **Neosho County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/11/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 21 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Neosho County economy.<sup>1</sup>

These 21 sectors have a total direct output of approximately \$139.7 million and support 788 jobs in Neosho County. Running the model for all 21 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Neosho County Economy									
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output⁵	Output % of Gross Regional Product			
Direct Effect	787.9	8.66%	\$30,561,820	5.36%	\$139,710,898	24.51%			
Indirect Effect	163.7	1.80%	\$10,122,085	1.78%	\$20,567,300	3.61%			
Induced Effect	79.5	0.87%	\$4,624,586	0.81%	\$8,366,332	1.47%			
Total Effect	1031.1	11.34%	\$45,308,491	7.95%	\$168,644,529	29.59%			

As shown in the above table, agriculture, food, and food processing sectors support 1,031 jobs, or 11.34% of the entire workforce in the county. These sectors provide a total economic contribution of approximately \$168.6 million, roughly 29.59% of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 21 agriculture, food, and food processing sectors is approximately \$45.3 million, or 7.95% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 7.95% of the total economy.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **539 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Neosho County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	539.4	\$45,266,176		
Grain farming	72.2	\$19,388,527		
Wholesale trade	42.4	\$7,781,615		
Oilseed farming	31.8	\$24,365,601		
Support activities for agriculture and forestry	26.5	\$506,886		
Landscape and horticultural services	26.2	\$1,361,564		
All other crop farming	25.4	\$1,418,781		
Truck transportation	20.5	\$3,373,765		
Dog and cat food manufacturing	18.4	\$25,167,956		
Veterinary services	16.6	\$1,509,796		

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately \$45.3 million to the Neosho County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	539.4	\$45,266,176		
Dog and cat food manufacturing	18.4	\$25,167,956		
Oilseed farming	31.8	\$24,365,601		
Grain farming	72.2	\$19,388,527		
Other animal food manufacturing	9.2	\$11,952,422		
Wholesale trade	42.4	\$7,781,615		
Truck transportation	20.5	\$3,373,765		
Sawmills	10.1	\$2,685,614		
Monetary authorities and depository credit intermediation	12.5	\$2,240,921		
Owner-occupied dwellings	0.0	\$1,990,395		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Neosho County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	31.8	\$24,365,600.99		
Grain farming	72.2	\$19,388,527.24		
Vegetable and melon farming	1.1	\$242,082.97		
Fruit farming	0.9	\$91,261.45		
Tree nut farming	0.8	\$131,147.55		
Greenhouse, nursery, and floriculture production	8.8	\$1,419,853.00		
All other crop farming	25.4	\$1,418,780.59		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	539.4	\$45,266,176.41		
Dairy cattle and milk production	2.5	\$1,070,152.33		
Poultry and egg production	0.7	\$577,543.52		
Animal production, except cattle and poultry and eggs	11.1	\$1,062,184.50		
Commercial logging	1.3	\$42,824.74		
Commercial hunting and trapping	1.7	\$33,890.70		
Dog and cat food manufacturing	18.4	\$25,167,955.73		
Other animal food manufacturing	9.2	\$11,952,422.30		
Animal, except poultry, slaughtering	1.4	\$948,060.71		
Bread and bakery product, except frozen, manufacturing	7.7	\$901,531.15		
Frozen cakes and other pastries manufacturing	0.5	\$73,927.28		
Sawmills	10.1	\$2,685,614.18		
Veterinary services	16.6	\$1,509,796.33		
Landscape and horticultural services	26.2	\$1,361,563.84		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Neosho County, the retail sector was omitted.